

CORRECTED VERSION

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
11 March 2004 (11.03.2004)

PCT

(10) International Publication Number  
**WO 2004/020684 A1**

(51) International Patent Classification<sup>7</sup>: C23C 2/06, 2/28

(21) International Application Number:  
PCT/EP2003/009730

(22) International Filing Date: 28 August 2003 (28.08.2003)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
02078543.2 28 August 2002 (28.08.2002) EP  
60/407,244 3 September 2002 (03.09.2002) US

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(81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU,

CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (*regional*): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

**Declaration under Rule 4.17:**

— *of inventorship (Rule 4.17(iv)) for US only*

**Published:**

— *with international search report*

(48) Date of publication of this corrected version:

27 May 2004

**(15) Information about Correction:**

see PCT Gazette No. 22/2004 of 27 May 2004, Section II

*For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*

(54) Title: ZINC ALLOY AND PROCESS FOR HOT-DIP GALVANNEALING OF STEEL

(57) Abstract: The present invention relates to a hot-dip coating alloy composition suitable for galvannealing steel sheet. The addition of 0.02 to 0.11 wt. % Cr to the alloy allows for an increased Al content in the bath, while ensuring a sufficient diffusion of Fe into the Zn coating during annealing. This is particularly advantageous for use in coating lines where galvanised and the galvannealed products are manufacturing alternatively. The addition of Cr allows to lower the annealing temperature and to shorten the residence time of the steel in the annealing furnace. Galvannealing dual phase steels, which should be processed at relatively low temperatures, is therefor greatly facilitated.

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